# EAST Search History

| Ref # | Hits | Search Query | DBs | Default Operator | Plurals | Time Stamp |
|---|---|---|---|---|---|---|
| L1 | 770 | (548/561).CCLS. | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2007/07/23 06:56 |
| L2 | 379 | (562/621).CCLS. | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2007/07/23 06:57 |
| L3 | 1500 | (514/408).CCLS. | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2007/07/23 06:57 |

## EAST Search History

| | | | | | | |
|---|---|---|---|---|---|---|
| L4 | 554 | (514/575).CCLS. | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2007/07/23 06:57 |
| L5 | 9 | l1 and l2 | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2007/07/23 06:57 |
| L6 | 44 | l3 and l4 | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2007/07/23 06:57 |

## EAST Search History

| | | | | | | |
|---|---|---|---|---|---|---|
| L7 | 5 | l5 and l6 | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2007/07/23 06:57 |

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* * * * * * * * * * * * * * * * STN Columbus * * * * * * * * * * * * * * * *

FILE 'HOME' ENTERED AT 06:52:38 ON 23 JUL 2007

=> file reg

| COST IN U.S. DOLLARS | SINCE FILE ENTRY | TOTAL SESSION |
|---|---|---|
| FULL ESTIMATED COST | 0.21 | 0.21 |

FILE 'REGISTRY' ENTERED AT 06:52:46 ON 23 JUL 2007
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Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 22 JUL 2007 HIGHEST RN 943125-41-5
DICTIONARY FILE UPDATES: 22 JUL 2007 HIGHEST RN 943125-41-5

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TSCA INFORMATION NOW CURRENT THROUGH December 2, 2006

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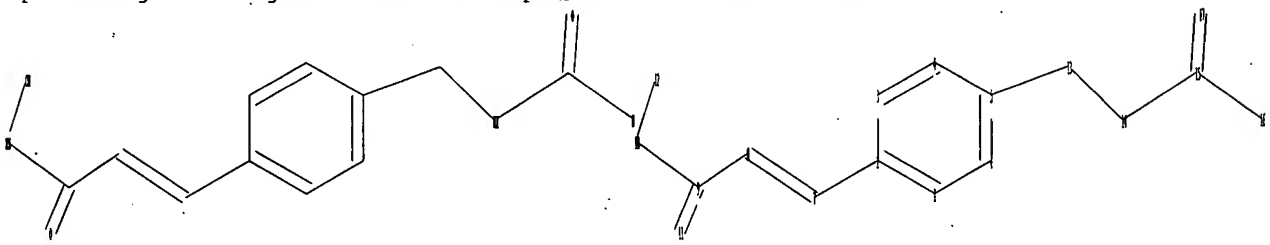
http://www.cas.org/support/stngen/stndoc/properties.html

=>
Uploading C:\Program Files\Stnexp\Queries\10510630.str



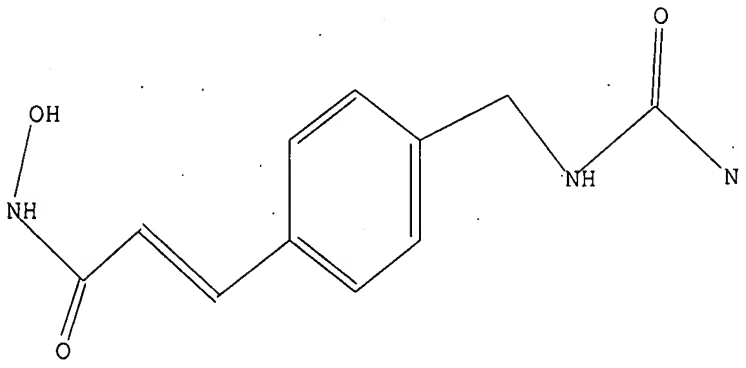
chain nodes :
7 8 9 10 11 12 13 14 15 16 17
ring nodes :
1 2 3 4 5 6
chain bonds :
2-7 5-13 7-8 8-9 9-10 9-11 10-12 13-14 14-15 15-16 15-17
ring bonds :

1-2 1-6 2-3 3-4 4-5 5-6
exact/norm bonds :
9-10 9-11 13-14 14-15 15-16 15-17
exact bonds :
2-7 5-13 7-8 8-9 10-12
normalized bonds :
1-2 1-6 2-3 3-4 4-5 5-6
isolated ring systems :
containing 1 :

Match level :
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:CLASS 8:CLASS 9:CLASS 10:CLASS
11:CLASS 12:CLASS 13:CLASS 14:CLASS 15:CLASS 16:CLASS 17:CLASS

L1 STRUCTURE UPLOADED

=> d
L1 HAS NO ANSWERS
L1 STR




Structure attributes must be viewed using STN Express query preparation.

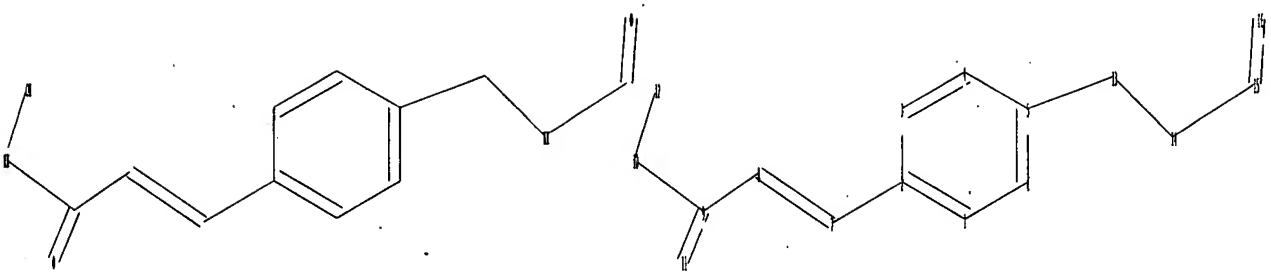
=> s l1
SAMPLE SEARCH INITIATED 06:53:11 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 3 TO ITERATE

100.0% PROCESSED 3 ITERATIONS 0 ANSWERS
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**
PROJECTED ITERATIONS: 3 TO 163
PROJECTED ANSWERS: 0 TO 0

L2 0 SEA SSS SAM L1

=>
Uploading C:\Program Files\Stnexp\Queries\105106301.str

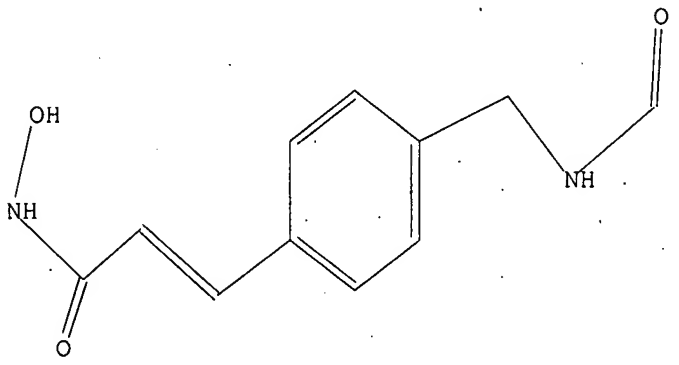


chain nodes :
7 8 9 10 11 12 13 14 15 16
ring nodes :
1 2 3 4 5 6
chain bonds :
2-7 5-13 7-8 8-9 9-10 9-11 10-12 13-14 14-15 15-16
ring bonds :
1-2 1-6 2-3 3-4 4-5 5-6
exact/norm bonds :
9-10 9-11 13-14 14-15 15-16
exact bonds :
2-7 5-13 7-8 8-9 10-12
normalized bonds :
1-2 1-6 2-3 3-4 4-5 5-6
isolated ring systems :
containing 1 :

Match level :
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:CLASS 8:CLASS 9:CLASS 10:CLASS
11:CLASS 12:CLASS 13:CLASS 14:CLASS 15:CLASS 16:CLASS

L3 STRUCTURE UPLOADED

=> d
L3 HAS NO ANSWERS
L3 STR




Structure attributes must be viewed using STN Express query preparation.

```
=> s l3
SAMPLE SEARCH INITIATED 06:54:56 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED -       22 TO ITERATE

100.0% PROCESSED       22 ITERATIONS                                3 ANSWERS
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS:  ONLINE  **COMPLETE**
                        BATCH   **COMPLETE**
PROJECTED ITERATIONS:          159 TO      721
PROJECTED ANSWERS:               3 TO      163

L4            3 SEA SSS SAM L3

=> s l3 full
FULL SEARCH INITIATED 06:55:07 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED -      328 TO ITERATE

100.0% PROCESSED      328 ITERATIONS                               19 ANSWERS
SEARCH TIME: 00.00.01

L5           19 SEA SSS FUL L3

=> file caplus
COST IN U.S. DOLLARS                          SINCE FILE      TOTAL
                                                 ENTRY   SESSION
FULL ESTIMATED COST                             173.45    173.66

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FILE LAST UPDATED: 22 Jul 2007  (20070722/ED)

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http://www.cas.org/infopolicy.html

=> s l4
L6            3 L4

=> d ibib abs hitstr tot
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L6 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2004:698117 CAPLUS
DOCUMENT NUMBER: 141:202277
TITLE: Dialkylbenzene hydroxylamide histone deacetylase inhibitors for use in therapeutics
INVENTOR(S): Urano, Yasuharu; Hosaka, Mitsuru; Kamijo, Kazunori
PATENT ASSIGNEE(S): Fujisawa Pharmaceutical Co., Ltd., Japan
SOURCE: PCT Int. Appl., 75 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

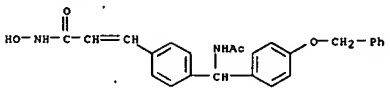
| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| WO 2004071401 | A2 | 20040826 | WO 2004-JP1437 | 20040210 |
| WO 2004071401 | A3 | 20041014 | | |

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI
RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: AU 2003-900587 A 20030211

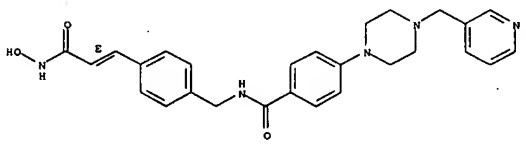
OTHER SOURCE(S): MARPAT 141:202277
AB Compds. R1R2CH-C6H4-L-CONR3 (R1 = lower alkyl optionally substituted with one or more suitable substituent(s), aryl optionally substituted with one or more suitable substituent(s), fused ring; R2 = acylamino, optionally protected OH; L = lower alkenylene; R3 = hydroxyamino), or salts thereof, are disclosed. The compds. are useful as inhibitors of histone deacetylase and may be used to treat a variety of diseases, e.g., inflammatory disorders, diabetes, cirrhosis, acute promyelocytic leukemia, protozoal infections, etc. Thus, over 100 compds. were synthesized and 4 were shown to inhibit histone deacetylase and to inhibit T cell growth.
IT 741708-57-6P
RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(dialkylbenzene hydroxylamide histone deacetylase inhibitors for use in therapeutics)
RN 741708-57-6 CAPLUS
CN 2-Propenamide, 3-[4-[(acetylamino)[4-(phenylmethoxy)phenyl]methyl]phenyl]-N-hydroxy- (9CI) (CA INDEX NAME)

L6 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



L6 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2003:921937 CAPLUS
DOCUMENT NUMBER: 140:111380
TITLE: Synthesis and Biological Evaluation of 3-(4-Substituted-phenyl)-N-hydroxy-2-propenamides, a New Class of Histone Deacetylase Inhibitors
AUTHOR(S): Kim, Dae-Kee; Lee, Ju Young; Kim, Jae-Sun; Ryu, Je-Ho; Choi, Jin-Young; Lee, Jun Won; Im, Guang-Jin; Kim, Tae-Kon; Seo, Jung Woo; Park, Hyun-Ju; Yoo, Jakyung; Park, Jung-Hyun; Kim, Tae-You; Bang, Yung-Jue
CORPORATE SOURCE: In2Gen Co., Ltd., Seoul, 110-799, S. Korea
SOURCE: Journal of Medicinal Chemistry (2003), 46(26), 5745-5751
CODEN: JMCMAR; ISSN: 0022-2623
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 140:111380
AB Inhibitors of histone deacetylases (HDACs) have been shown to induce differentiation and/or apoptosis of human tumor cells. Novel 3-(4-substituted-phenyl)-N-hydroxy-2-propenamides have been prepared as a new class of HDAC inhibitors and evaluated for their antiproliferative activity and HDAC inhibitory activity. Incorporation of a 1,4-phenylene carboxamide linker and a 4-(dimethylamino)phenyl or 4-(1-pyrrolidinyl)phenyl group as a cap substructure generated highly potent hydroxamic acid-based HDAC inhibitors. Compds. thus prepared included 3-(4-[[[[4-(dimethylamino)phenyl]carbonyl]amino]methyl]phenyl]-N-hydroxy-2-propenamide, N-hydroxy-3-[4-[[[[4-(1-pyrrolidinyl)phenyl]carbonyl]amino]methyl]phenyl]-2-propenamide, N-hydroxy-3-[4-[[[(3-pyridinyl)carbonyl]amino]methyl]phenyl]-2-propenamide, N-hydroxy-3-[4-[[[(2-pyridinyl)carbonyl]amino]methyl]phenyl]-2-propenamide.
IT 617690-93-4P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(preparation, biol. evaluation of (phenyl)-N-hydroxypropenamides as histone deacetylase inhibitors)
RN 617690-93-4 CAPLUS
CN Benzamide, N-[[4-[(1E)-3-(hydroxyamino)-3-oxo-1-propenyl]phenyl]methyl]-4-[4-(3-pyridinylmethyl)-1-piperazinyl]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

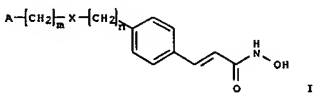


L6 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
REFERENCE COUNT: 39 THERE ARE 39 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2003:837054 CAPLUS
DOCUMENT NUMBER: 139:337992
TITLE: Preparation of α,β-unsaturated hydroxamic acid derivatives as histone deacetylase inhibitors
INVENTOR(S): Kim, Dae-Kee; Lee, Ju Young; Lee, Nam Kyu; Kim, Jae-Sun; Lee, Junwon; Lee, Suk Ho; Choi, Jin Young; Ryu, Je Ho; Kim, Nam Ho; Im, Guang-Jin; Kim, Tae Kon; Seo, Jung-Woo; Bang, Young-Jue
PATENT ASSIGNEE(S): SK Chemicals, Co. Ltd., S. Korea; In2Gen Co., Ltd.
SOURCE: PCT Int. Appl., 36 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| WO 2003087066 | A1 | 20031023 | WO 2003-KR721 | 20030410 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | | |
| RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | | |
| AU 2003219595 | A1 | 20031027 | AU 2003-219595 | 20030410 |
| US 2005124679 | A1 | 20050609 | US 2003-510630 | 20030410 |
| KR 2003081173 | A | 20031017 | KR 2003-22994 | 20030411 |
| PRIORITY APPLN. INFO.: | | | KR 2002-19712 A | 20020411 |
| | | | WO 2003-KR721 W | 20030410 |

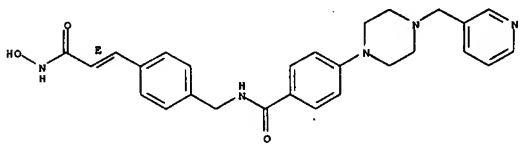
OTHER SOURCE(S): MARPAT 139:337992
GI



AB The title compds. [I; A = (un)substituted Ph, heterocyclyl; m = 0-4; n = 1-4; X = CONR1, OCONR1, SO2, NR2SO2; R1, R2 = H, alkyl] that inhibit histone deacetylase, were prepared More specifically, the present invention

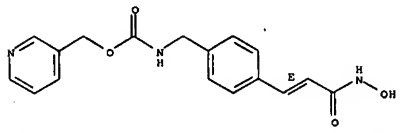
L6 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
relates to novel hydroxamic acid derivs. I or pharmaceutically acceptable salts thereof for anticancer agents or other therapeutic agents based on their histone deacetylase inhibitory activity. E.g., a 3-step synthesis of N-[4-(2-hydroxycarbamoylvinyl)benzyl]-4-[4-(pyridin-3-ylmethyl)piperazin-1-yl]benzamide (starting from 1-(pyridin-3-ylmethyl)piperazine and 4-fluorobenzonitrile) which showed IC50 of 11.98 μM, 3.19 μM and 38.59 μM in human cancer cell lines such as A-549, SK-BR-3 and MKN-45 (resp.), was given. Pharmaceutical compn. comprising the compd. I is claimed.
IT 617690-93-4P 617691-00-6P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of α,β-unsatd. hydroxamic acid derivs. as histone deacetylase inhibitors)
RN 617690-93-4 CAPLUS
CN Benzamide,
N-[[4-[(1E)-3-(hydroxyamino)-3-oxo-1-propenyl]phenyl]methyl]-4-[4-(3-pyridinylmethyl)-1-piperazinyl]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



RN 617691-00-6 CAPLUS
CN Carbamic acid,
[[4-[(1E)-3-(hydroxyamino)-3-oxo-1-propenyl]phenyl]methyl]-, 3-pyridinylmethyl ester (9CI) (CA INDEX NAME)

Double bond geometry as shown.



REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE
FORMAT

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ALL L# QUERIES AND ANSWER SETS ARE DELETED AT LOGOFF
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COST IN U.S. DOLLARS                          SINCE FILE      TOTAL
                                                   ENTRY    SESSION
FULL ESTIMATED COST                               16.28     189.94

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)    SINCE FILE      TOTAL
                                                   ENTRY    SESSION
CA SUBSCRIBER PRICE                               -2.34      -2.34

STN INTERNATIONAL LOGOFF AT 06:55:37 ON 23 JUL 2007
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